

Observations from Space: A Unique Vantage Point for the Study of the Environment and Possible Associations with Disease Occurrence

Presenters: S. Estes, J. Haynes, M. Al Hamdan, M. Estes, W. Sprigg

Objective:

Health providers/researchers need environmental data to study and understand the geographic, environmental, and meteorological differences in disease. Satellite remote sensing of the environment offers a unique vantage point that can fill in the gaps of environmental, spatial, and temporal data for tracking disease. The field of geospatial health remains in its infancy, and this program will demonstrate the need for collaborations between multi-disciplinary research groups to develop the full potential. NASA will discuss the Public Health Projects developed to work with Grantees and the CDC while providing them with information on opportunities for future collaborations with NASA for future research.

Relevance/Significance

Satellite earth observations present a unique vantage point of the earth's environment from space which offers a wealth of health applications for the imaginative investigator. The session will present research results of the remote sensing environmental observations of earth and health applications which can contribute to the tracking/surveillance network.

Approach/Methodology

NASA has used satellite remote sensing of the environment to provide a method for bridging gaps of environmental, spatial, and temporal data for tracking disease. This panel review will provide an overview of projects CDC, the University of Alabama, Birmingham, the University of New Mexico, New Mexico Department of Public Health and the University of Arizona.

Results

1. Inform clinicians and researchers about ongoing NASA projects related to diseases and how they are related to the tracking network and how the grantees can utilize this data and become a partner in this research.
2. Provide an overview of projects in the areas of observations of earth's environment and public health applications that are of interest to clinicians and researchers
3. This research has been shown to be very beneficial to stakeholders in the funded as well as non-funded states.

Conclusions and Recommendations

This session provides a venue where the results of both research and practice using remote sensing when applied to public health and the environment will be showcased. Following the presentation of papers a panel discussion will include such topics as the impact, implications and how these types of projects are relative to the community.

